Application No.: 09/049,304 Docket No.: BB-1037-F

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(once amended) The chimeric gene according to Claim 6 wherein the isolated nucleic acid fragment comprises a nucleic acid sequence or functional subsequence of the nucleic acid sequence set forth in SEQ ID NO:120.

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- 11. (once amended) A plant seed transformed with the chimeric gene of claim 6 or 7 wherein said transformed plant seed has an increased lysine content compared to seed obtained from an untransformed plant.
- 14. (once amended) A method for [reducing lysine ketoglutarate reductase activity] increasing lysine content in a plant seed which comprises:
 - (a) transforming plant cells with the chimeric gene of claim 6 or 7;
- (b) regenerating fertile mature plants from the transformed plant cells obtained from step (a) under conditions suitable to obtain seeds;
 - (c) screening progeny seed of step (b) for increased lysine content; and
 - (d) selecting those lines whose seeds have increased lysine content.

Kindly add the following new claims:

Signal 2

- --21. (new) An isolated nucleic acid fragment comprising a nucleic acid sequence which is useful in antisense inhibition or sense suppression of endogenous lysine ketoglutarate reductase activity in a transformed corn plant wherein said isolated nucleic acid fragment comprises all or part of the nucleic acid sequence of SEQ ID NO:120.
- 22. (new) A chimeric gene capable of causing an increased level of lysine in seeds obtained from a transformed corn plant, the chimeric gene comprising a nucleic acid fragment of Claim 21, said fragment being operably linked to at least one regulatory sequence.
- 23. (new) A corn plant comprising the chimeric gene of claim 22 in its genome.
 - 24. (new) Seed obtained from the corns plant of claim 23.
- 25. (new) A method for increasing lysine content in a corn plant seed which comprises:
 - (a) transforming com plant cells with the chimeric gene of claim 21;
- (b) regenerating fertile mature corn plants from the transformed corn plant cells obtained from step (a) under conditions suitable to obtain seeds;
 - (c) screening progeny seed of step (b) for increased lysine content; and
 - (d) selecting those lines whose seeds have increased lysine content.
 - 26. (new) Corn olant seed obtained by the method of claim 26 or 27.--